

ABSTRACT OF THE DISCLOSURE

[0055] Laser apparatus and methods that permit actuation of a tuning element via a magnetically coupled drive assembly, and which provide for isolation of contamination-sensitive optical surfaces within a hermetically sealed enclosure with a magnetically coupled drive assembly that is external to the enclosure. The apparatus of the invention comprises a tuning element positioned in a light beam, and a drive element magnetically coupled to the tuning element. The apparatus may further comprise a hermetically sealed enclosure, with the tuning element positioned within the hermetically sealed enclosure, and the drive element located outside the hermetically sealed enclosure. The methods comprise positioning a tuning element in a light beam, magnetically coupling a drive element to the tuning element; and actuating the tuning element via magnetic coupling between the tuning element and the drive element. The methods may further comprise enclosing the tuning element in a hermetically sealed container.